

[54] **PROGRAM HOLDER FOR A JUKE BOX OR THE LIKE**

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[51] Int. Cl. **G09f 19/14**

[58] Field of Search **40/132 R, 130 R, 132 D, 40/137, 135, 28 R; 161/6, 3.5, 409, 164, 166; 35/8 R; 350/319, 263, 117; 272/8 D, 8 P, 8 M, 8 N; 52/616**

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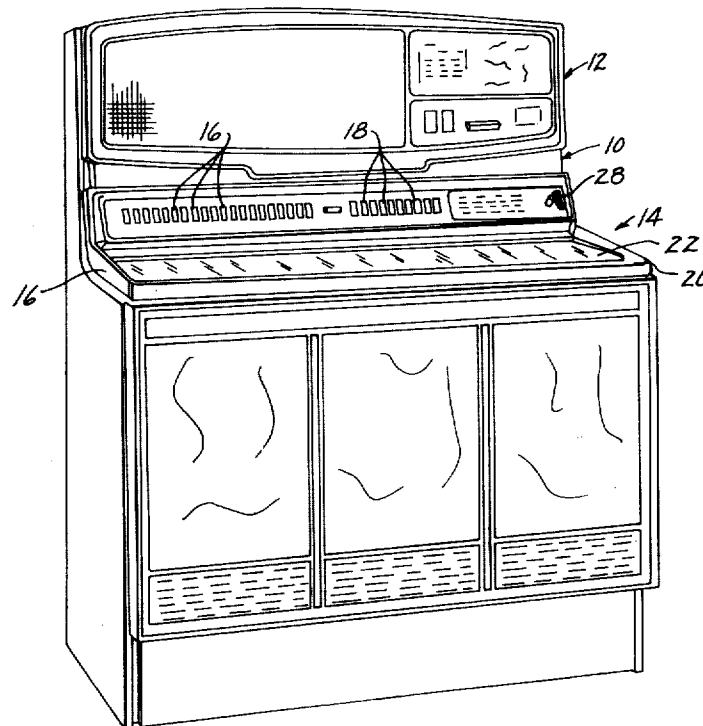
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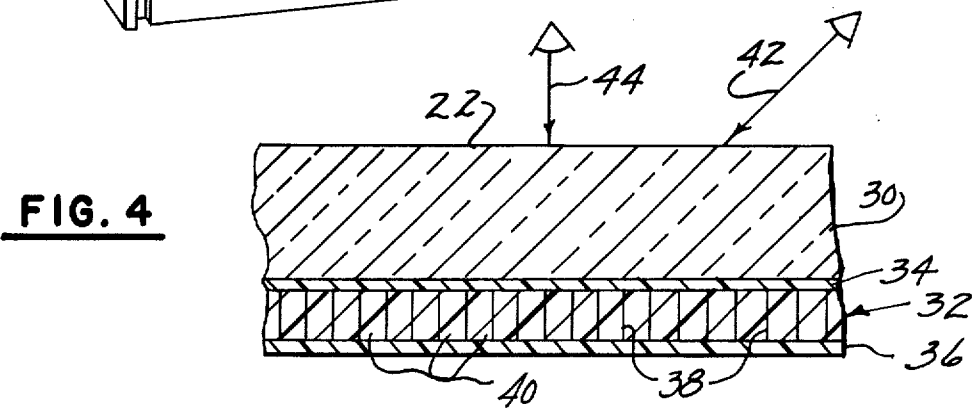
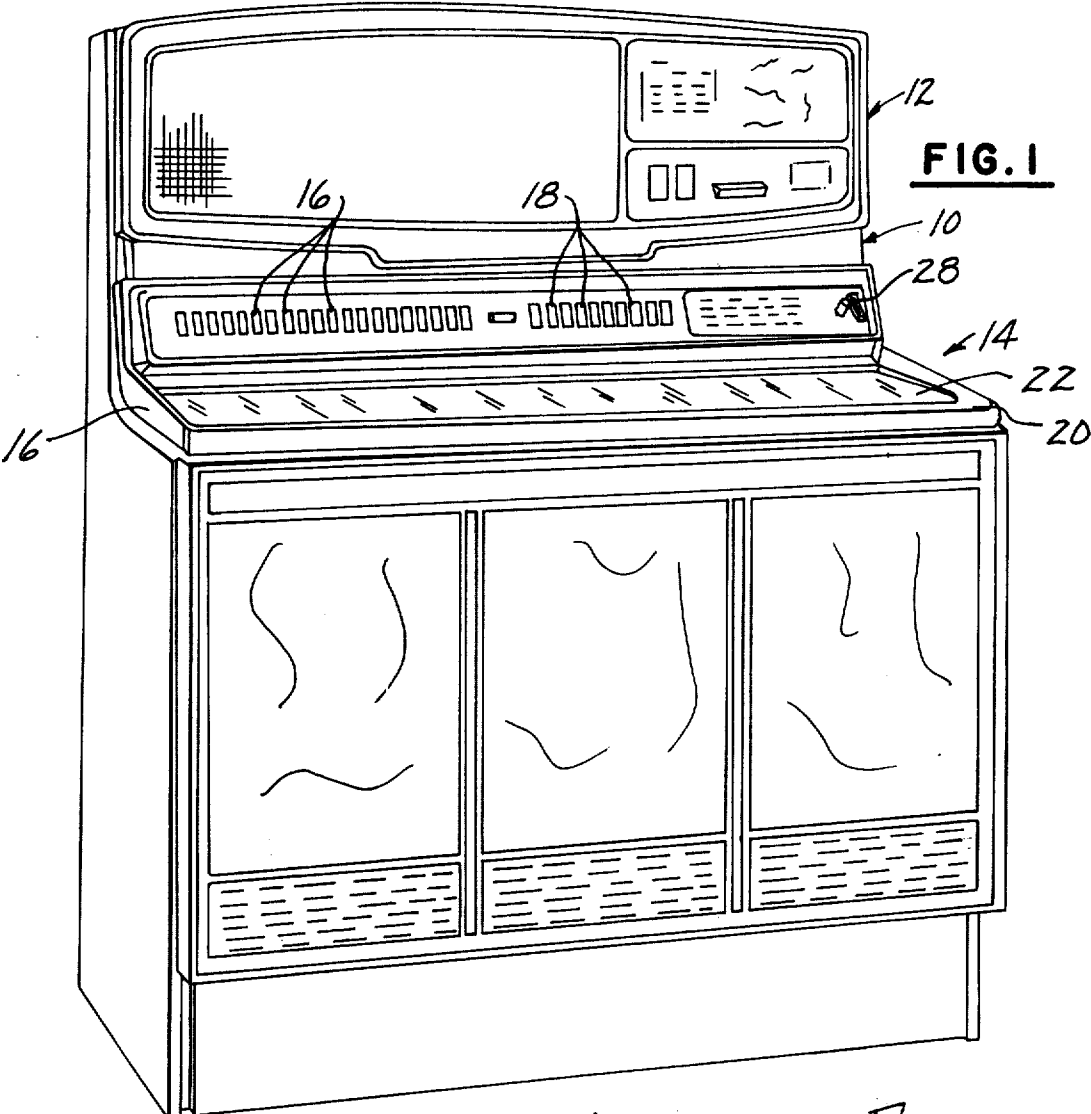
Attorney, Agent, or Firm—Olson, Trexler, Wolters, Bushnell & Fosse, Ltd.

[57] **ABSTRACT**

Disclosed is a program holder for visual display of indicia which are on a display panel of a juke box for indicating the selection of records therein. The program holder includes support means forming the periphery of an upper wall of the juke box and the indicia bearing members are mounted within the support means. A cover means is positioned on the support means and over the indicia bearing members to provide a substantially opaque surface to a viewer who is several feet away. However, when the viewer approaches the juke box to within two feet or so the cover means becomes transparent to provide visual display of the indicia bearing members positioned under the cover. A view control means is associated with the cover and can be either a laminated film having a plurality of thin, closely spaced louvers associated therewith or it can be a darkened glass or plastic cover with a light bulb beneath the cover which is actuated upon sensing the presence of a viewer within a predetermined distance of the juke box.

3 Claims, 9 Drawing Figures





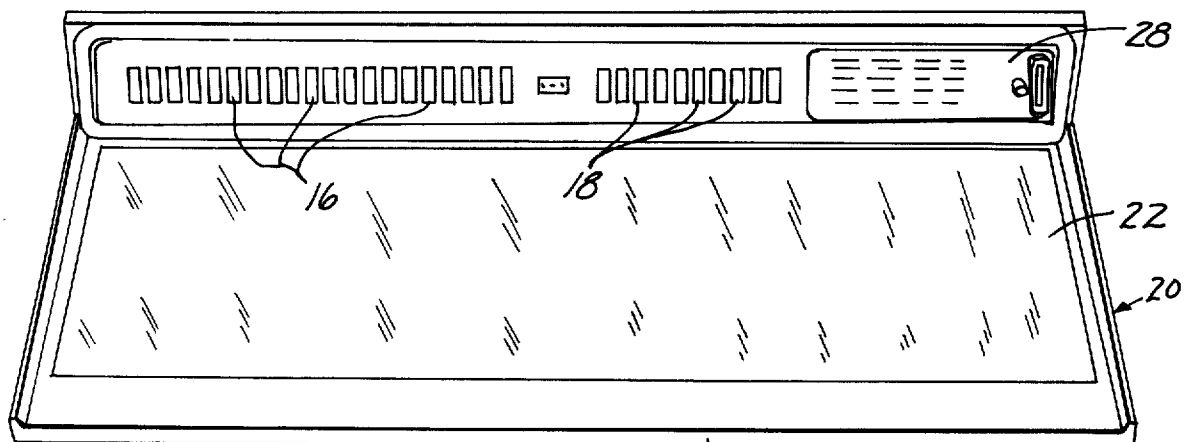


FIG. 2

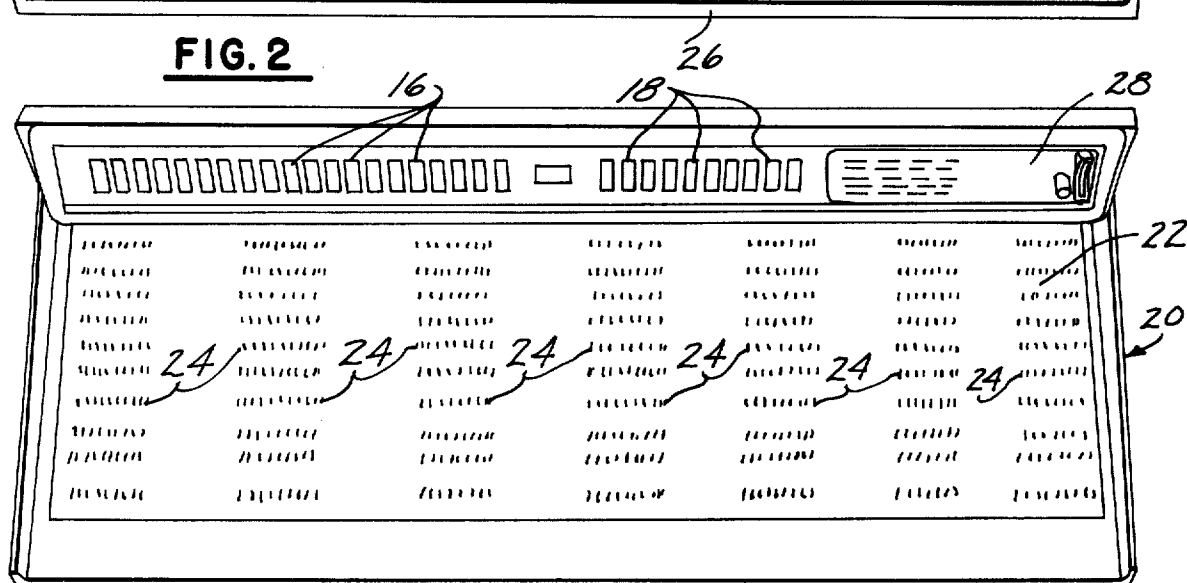


FIG. 3

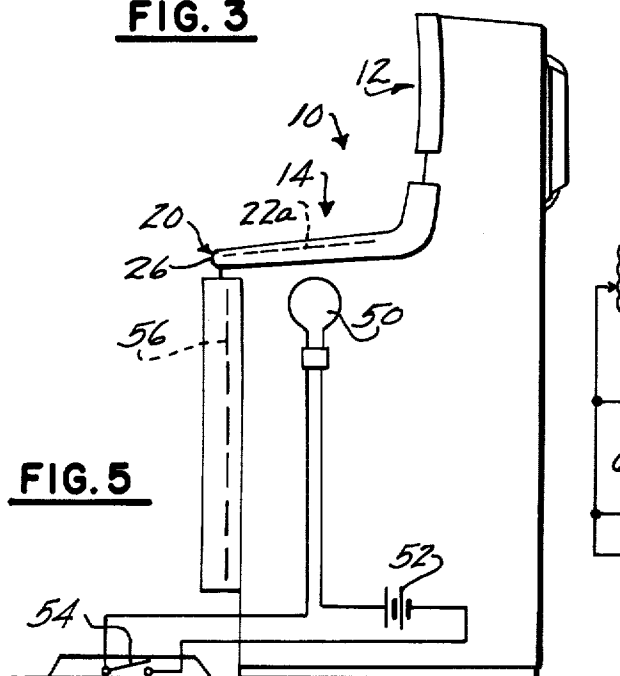


FIG. 5

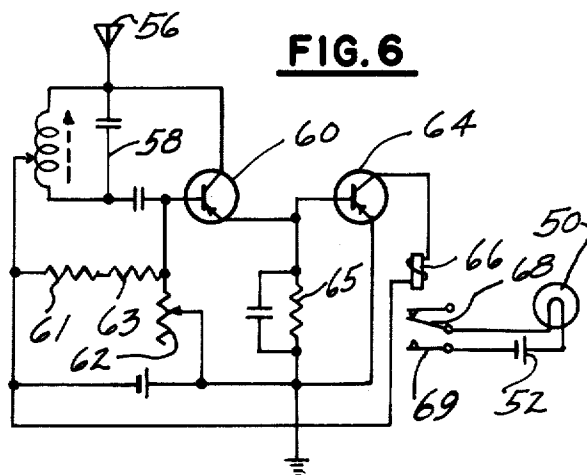
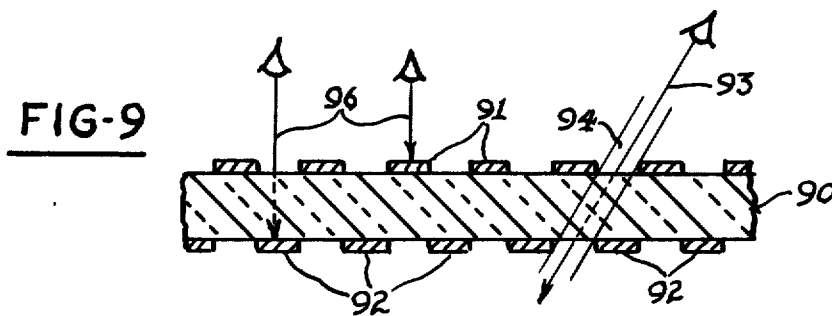
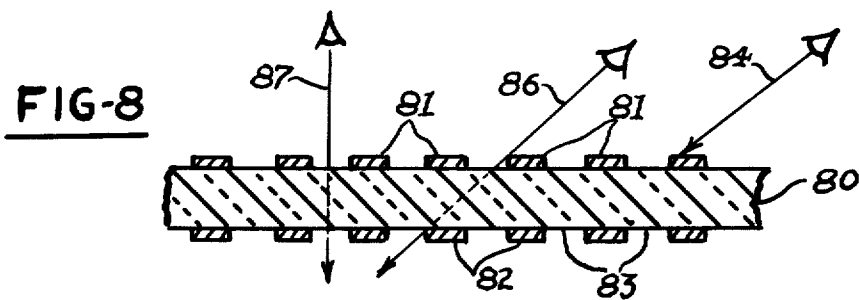
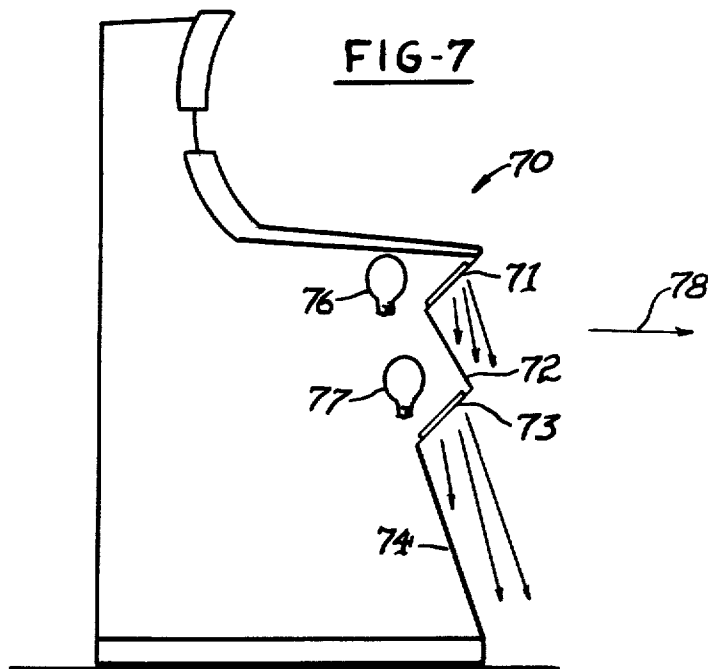


FIG. 6



PROGRAM HOLDER FOR A JUKE BOX OR THE LIKE

BACKGROUND OF THE INVENTION

This invention relates generally to a program holder for visual display of indicia bearing members. The program holder forms the top display panel of a juke box.

Heretofore, the program holder of indicia bearing members on juke boxes, or the like, have been exposed to view by all persons in the general area of the juke box. That is, users of the juke box who are in close to the program holder can easily see the indicia bearing members to make their desired musical selections. However, passersby, as well as those some distance away, can also see the program holder but cannot read the indicia bearing members. The indicia bearing members may be, to at least some of the people standing away from the juke box, distracting to the general esthetic appearance of the juke box. Since only the viewer in close proximity to the juke box who is making a selection need read the indicia bearing members, it is not necessary that other persons standing some distance away be able to also see the indicia bearing members.

The general range of distance from the juke box for visual display of the indicia bearing members is in the order of 1 to 3 feet, 2 feet being a typical average distance from which viewers should be able to see the indicia bearing members. For example, if a person desires to make coin selections of the juke box, he moves up to the juke box, and as he comes within 2 feet or so from the top display panel thereof the indicia bearing members should come into clear view. However, to persons beyond the range of reading the indicia bearing members the juke box should have an esthetic substantially indicia-free appearance.

SUMMARY OF THE INVENTION

Accordingly, it is an object of this invention to provide means for a program holder which does not allow indicia bearing members to be readily viewable by persons at a distance therefrom but which becomes transparent to persons who approach the program holder to within a predetermined minimum distance so that such indicia bearing members then become visible.

Another object of this invention is to provide a program holder which is efficient and reliable in operation and relatively inexpensive and easy to manufacture.

Other objects, features and advantages of this invention will be more fully realized and understood from the following detailed description when taken in conjunction with the accompanying drawings wherein like reference numerals throughout the various views of the drawings are intended to designate similar elements or components.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective frontal view of a juke box utilizing a program holder constructed in accordance with this invention;

FIG. 2 is an angled perspective view of a program holder of this invention showing a relatively opaque cover surface over indicia bearing members when viewed from a predetermined distance therefrom;

FIG. 3 is a top perspective view of the program holder of FIG. 2 but wherein the cover surface thereof is substantially transparent to allow visual perception of

indicia bearing members thereunder when viewed from at a closer distance;

FIG. 4 is an enlarged sectional view of a laminate film which has louvers and can be used to control the viewability of the indicia bearing members under the program holder of this invention;

FIG. 5 is an alternate form of this invention for controlling the viewability of the indicia bearing members within the program holder of a juke box;

FIG. 6 is still another alternate form of this invention;

FIG. 7 is an alternate form of juke box wherein light control panels are used to illuminate the front surface of the unit;

FIG. 8 illustrates an alternate form of a light control panel in accordance with this invention; and

FIG. 9 is still another alternate form of a light control panel in accordance with this invention.

DETAILED DESCRIPTION OF THE ILLUSTRATED EMBODIMENTS

Referring now to FIG. 1 a juke box is designated generally by reference numeral 10 and includes a vertical display panel 12 and a horizontal or substantially horizontal display panel 14. The vertical display panel 12 may include such things as visual readout of information as what record is now being played or the like. On the other hand, the horizontal display panel may include indicia bearing members for indicating the names and types of selections that can be made. A plurality of alphabetically arranged pushbuttons 16 are provided with a lesser number of pushbuttons 18 of numerical arrangement. By selecting a coded sequence of pushbuttons, either first letter and then number or first number and then letter the proper code information is fed into the juke box 10 for making the musical selections.

In accordance with this invention a program holder designated generally by reference numeral 20 is conveniently located in the horizontal display panel 14 and in front of the pushbuttons 16 and 18 so that the entire program can be viewed by a user standing in front of the juke box who can then insert his coin or coins to make a pushbutton selection. The program holder 20 has a cover member 22 associated therewith and the cover member is over the plurality of indicia bearing members.

In accordance with this invention light control means are provided to cause the cover member 22 to be substantially opaque to a viewer who is standing 3 or more feet away from the juke box. However, when the viewer moves closer to the juke box the cover member becomes transparent and the viewer can visually scan the indicia bearing members and make a selection. This is best illustrated in FIGS. 2 and 3. For example, in FIG. 2 the cover member 22 is illustrated as being substantially opaque, it including either a laminated film to control light or a darkened glass or plastic top which has a light bulb underneath. As the viewer moves closer to the juke box to within approximately 2 feet more or less, the cover member 22 becomes transparent, as illustrated in FIG. 3, to allow visual display of the indicia bearing members 24 underneath the cover.

The program holder 20 includes a support frame 26 which has suitable rack means, not shown, to allow ease of changeability of the indicia bearing members. Therefore, when records in the juke box are changed so also can the designation in the program holder be

changed. The support frame 26 may include a coin receiving means 28 which includes a coin slot and a coin return button together with a schedule of prices. Thus, the support frame 26 and the horizontal display panel include all the information and equipment necessary for a viewer to scan the entire program holder 20 to make his selection and then insert a coin or coins into the coin slot followed by depressing the appropriate buttons 16 and 18 to effect the selection.

One means for carrying out the novel concepts of this invention is illustrated in FIG. 4 which shows the cover 22 as being either a clear glass or plexiglass member 30 under which is secured a laminate film 32 for controlling the passage of light therethrough. However, it will be understood that the cover 22 may be comprised entirely of a plexiglass structure similar to that of the laminate film and thus eliminate the two piece construction as illustrated here. The glass 30 on the other hand may be of the darkened or substantially opaque type which allows viewing therethrough only when an auxiliary light is placed at the opposite side of the darkened glass.

The laminate film 32 includes a pair of upper and lower transparent layers 34 and 36 with a plurality of thin vertical louvers 38 extending therebetween. The louvers 38 are in the order of 0.0003 inches in width and extend along the cover 22 from side to side of the juke box 10. Between each of the darkened louvers 38 is a substantially wider transparent segment 40 which has a thickness in the order of 0.010 inches. Therefore, the transparent area of the film 32 is substantially greater than the opaque area provided by the vertical portions of the louvers when looking directly through the film. For example, a viewer looking through the support glass 30 and the film 32 along a viewing angle 42 will observe an opaque surface of the film since he will see nothing but the side portions of each of the thin darkened louvers. As the viewing angle moves closer and closer to the perpendicular, this being shown by perpendicular viewing angle 44, the viewer can see directly through the film 32 and thus see the indicia bearing members under the cover to make the desired selection.

Referring now to FIG. 5, an alternate form of this invention is here illustrated. The juke box 10 has a darkened glass cover 22a carried by the support 26 and a light bulb 50 is positioned under the cover 22a and energized by a battery 52 when a switch 54 is closed. The switch 54 is preferably of the type formed by a floor pad in front of the juke box and upon which a viewer will stand when he approaches. The light 50 may be a series of elongated light bulbs about the periphery of the support 26 and positioned between the top cover 22a and the indicia bearing members 24. The distance at which the viewer will be allowed to see the indicia bearing members will depend upon the distance the switch 54 is placed in front of the juke box 10.

Another means of causing the cover 22 to change from opaque to transparent is to provide an antenna or capacity operated control circuit which will actuate a relay when the viewer approaches the juke box. The antenna may be located in the front panel of the juke box as indicated by reference numeral 56 and the antenna may be part of a capacity operated relay circuit as shown in FIG. 6. Here a tuned circuit 58 is connected to the antenna 56 and also connected to a transistor 60 which has the base electrode thereof con-

nected to an adjustable resistor 62. The sensitivity of the circuit is set by the adjustment of potentiometer 62 so that the distance at which a viewer will activate or de-activate the circuit can be controlled. The output of transistor 60 is applied to the base electrode of a second transistor 64 which, in turn, applies energizing current to a relay coil 66.

The tuned circuit 58 and transistor 60 form an oscillator circuit with a feedback path through a pair of series connected resistors 61 and 63. When no person approaches the juke box 10 the oscillator circuit operates and applies operating bias to the base electrode of transistor 64, this operating bias being developed across a resistor capacitor network 65. The transistor 64 is conductive and the relay holding coil 66 is energized to maintain contacts 68 and 69 open. However, when a person approaches the juke box 10 an antenna 56 causes detuning of the tune circuit 58 to render the oscillator circuit formed thereby inoperative. This will remove operating bias from transistors 64 and thus deenergize the relay holding coil 66 to cause contacts 68 and 69 to come together and energize the light 50 from the battery source 52.

Referring now to FIG. 7 an alternate form of display panel for a juke box is illustrated. Here the juke box is designated generally by reference numeral 70 and utilizes a light control display panel 71 on the frontal wall thereof. The light control panel 71 is tilted forward and downward so that light rays passing therethrough will impinge upon a lower grill portion 72. The grill portion 72 may extend from the light control panel 71 completely to the floor or it may be a partial grill portion, as shown, in which case a second light control panel 73 may be utilized and tilted in substantially the same manner as the light control panel 71, it being understood that any other position can be incorporated. The light control panel 73 directs light therethrough upon the lower grill portion 74 of the frontal wall of the juke box. A pair of light bulbs 76 and 77 are positioned behind the light control panels 71 and 73, respectively, and the light therefrom is directed downwardly onto the grill portion 72 and 74. Therefore, persons passing in front of the juke box 70 will not have light rays directed toward them, this being in the direction indicated by the arrowed line 78.

The light control panels utilized in the several embodiments of this invention can take several forms, they being either like the light control panel 32 shown in FIG. 4 or like one of the alternate forms shown in FIGS. 8 and 9. In FIG. 8 the light control panel has a transparent support member 80, it being a clear glass or plastic material. Upon both surfaces of the transparent support 80 are formed diametrically opposed darkened bands 81 and 82 having a predetermined width and spacing therebetween. The darkened bands 81 and 82 may be formed either by a silkscreen process or by placing thin ribbons of pressure sensitive tape onto the surfaces of the support plate 80.

Light rays passing along the sight line 84 will impinge upon one or the other of the darkened bands 81 or 82 and thereby not pass through the transparent support plate 80. Only those light rays which pass between the darkened bands 81 and 82 will be visible from the other side of the light control panel. For example, light rays passing along the sight line 86 pass close to, but do not impinge upon, the darkened bands. However, more perpendicular light rays as indicated by the sight line 87

pass unobstructed through the transparent support panel. The light control panel of FIG. 8 allows light rays only to pass when they are within a given angle of incidence about the perpendicular of the support plate 80.

An alternate form of light control panel is illustrated in FIG. 9. Here a transparent support plate 90 has darkened ribbon portions 91 and 92 on opposite sides thereof. The darkened ribbons 91 and 92 are staggered so that only angularly disposed light rays passing along the sight line 93, or substantially along such angle, will pass through the transparent support plate 90. This allows light rays within a given dimension, as indicated by reference numeral 94, to pass through top darkened bands 91, through the support plate 90 and then through angularly disposed bottom bands 92. Light rays impinging perpendicularly upon the light control panel of FIG. 9, as shown by the sight line 96, will not pass through the support plate.

The light control panels of FIGS. 4, 8 and 9 can be used in any combination of configurations on the top or front panels of a juke box or other vending machine either to control the visibility of certain portions through the top or front walls thereof or to direct light upon certain selected surfaces.

While several means have been illustrated for carrying out the novel concepts of this invention it will be understood that variations and modifications may be effected without departing from the spirit and scope of the novel concepts as set forth herein and as defined by the following claims.

The invention is claimed as follows:

1. A juke box having a plurality of records therein to provide musical selections to a user, and a plurality of

indicia bearing members corresponding to said plurality of records so that the musical selections on the records can be identified by a selection code, and selector means to effect selection of the desired record after it has been identified by the indicia bearing members, the improvement therein comprising cover means positioned over said indicia bearing members, said cover means being opaque to a viewer when said viewer is beyond a predetermined distance from the juke box, and view control means comprising louver means associated with said cover means and arranged to appear transparent as a result of advance of said viewer toward the juke box to within a predetermined distance for visual display of said indicia bearing members through said cover means.

2. The juke box of claim 1 wherein said view control means includes film means having a plurality of thin, closely spaced louvers extending from side to side in a direction transverse to the direction of advance of said viewer, whereby said predetermined distance of said viewer from the juke box is determined by the angle of incident of the line of sight of said viewer upon said louvers.

3. The juke box of claim 2 wherein said film means is a laminate structure having upper and lower transparent sheets and said plurality of thin, closely spaced opaque louvers extending between said transparent sheets, and a corresponding plurality of transparent slats between each of said louvers and between said sheets, said louvers having a cross sectional thickness less than said transparent slats.

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